
s e c t i o n 12

Transportation
Vehicles

table 12-1

Number of Transportation Vehicles/Equipment

	Canada			Mexico			United States		
	1990	1995	1996	1990	1995	1996	1990	1995	1996
Air	23,674	22,714	22,685	5,874	6,426	6,255	^a197,200	196,800	201,900
Commercial aircraft	5,775	5,752	5,816	847	1,283	1,184	^a 16,125	18,270	18,597
Jets	344	380	414	100	175	177	^a 5,166	5,724	6,158
Non-jets	5,431	5,372	5,402	33	57	57	^a 10,959	12,546	12,439
General aviation	17,899	16,962	16,869	5,027	5,143	5,071	^a 181,100	178,500	183,300
Road	16,981,130	^r17,048,297	^r17,182,626	10,165,715	11,917,543	12,395,935	193,057,376	205,427,212	210,236,393
Personal vehicles	12,981,053	13,512,653	13,562,927	7,089,059	8,183,903	8,623,267	186,234,513	198,022,288	202,533,376
Passenger cars	12,622,038	13,192,272	13,251,146	6,839,337	8,046,926	8,436,909	133,700,496	128,386,775	129,728,341
Motorcycles	359,015	320,381	311,781	249,722	136,977	186,358	4,259,462	3,897,191	3,871,237
Light trucks	N	N	N	N	N	N	48,274,555	65,738,322	68,933,798
Buses	63,962	64,339	64,550	94,575	121,870	^p 98477	626,987	685,503	696,609
Charter	1,810	2,661	3,305	U	U	U	N	N	N
Intercity	1,356	1,191	1,052	30,579	47,254	^p 43,533	N	N	N
Local motor	11,243	10,852	10,797	U	U	U	58,714	67,107	^p 67,874
School	29,726	27,934	27,855	U	U	U	N	N	N
Commercial freight vehicles	176,368	181,568	206,305	2,982,081	3,611,770	3,674,191	6,195,876	6,719,421	7,006,408
Single-unit trucks	40,719	33,463	35,290	U	U	U	4,486,981	5,023,670	5,264,554
Tractors	66,919	87,662	92,059	U	U	U	1,708,895	1,695,751	1,741,854
Rail									
Cars									
Freight cars	123,137	110,784	109,578	46,602	35,042	29,438	1,108,734	1,134,203	1,153,209
Intercity passenger train cars	1,088	517	466	1,427	767	513	1,863	1,722	1,730
Locomotives	3,562	3,299	3,258	1,677	1,400	1,318	19,153	19,125	19,568
Freight	3,351	3,171	3,142	U	U	U	18,835	18,812	19,269
Intercity passenger	211	128	116	U	U	U	318	313	299
Transit	13,156	13,140	13,049	N	N	N	92,961	115,874	^p119,556
Transit railcars	1,913	2,288	2,252	238	322	331	15,747	15,721	^p 16,006

t a b l e 12-1**Number of Transportation Vehicles/Equipment—Continued**

	Canada			Mexico			United States		
	1990	1995	1996	1990	1995	1996	1990	1995	1996
Water transport^b	N	N	N	N	N	N	N	237,733	244,683
Passenger vessels	N	N	N	62	58	57	U	159,177	168,576
Recreational boats	N	N	N	N	N	N	U	154,369	163,756
Passenger cruise	55	52	50	N	N	N	U	126	136
Other passenger	87	87	88	62	58	57	U	4,682	4,684
Freight vessels	1,082	747	734	1,938	1,916	1,903	U	74,375	76,107
Liquid	47	31	29	34	33	32	4,216	4,181	4,116
Tanker	44	31	29	34	33	32	213	195	178
Tank/barge	3	0	0	N	N	N	4,003	3,986	3,938
Dry bulk carrier	83	74	73	3	1	1	81	78	72
Other dry cargo	89	40	40	242	229	222	27,940	28,039	29,429
Container	1	1	1	N	N	N	89	91	88
Specialized carrier	5	0	0	13	13	13	143	181	180
General cargo	62	39	39	22	16	15	592	390	386
Dry cargo barge	21	0	0	207	200	194	27,116	27,377	28,775
Miscellaneous types	863	602	592	1,659	1,653	1,648	U	42,077	42,490
Fishing	512	312	298	1,437	1,392	1,392	U	35,658	36,038
Offshore vessels	44	23	27	25	56	56	1,177	1,291	1,275
Tow boats ^c	0	178	178	80	97	91	5,213	5,128	5,177
Other	307	89	89	117	108	109	N	N	N

^aAir data are for 1992, the earliest year for which data are broken out in this fashion.

^bUnless noted, water transport vessels represent those which are operated by the individual country but not necessarily owned. Vessels are organized according to the International Classification of Ship Type (ICST).

^cTowboats include both pushboats and tugboats.

KEY: N = Data are nonexistent. p = Data are preliminary. r = Data are revised. U = Data are unavailable.

table 12-1

Number of Transportation Vehicles/Equipment—*Continued*

NOTES

All Countries

Air: For Canada and the United States, on-demand air taxis are included in commercial aircraft and are excluded from general aviation. For the United States, this is different from the way the data are sometimes presented. For Mexico, air taxis are included in the total for commercial aircraft and are not identifiable as jet and non-jet in the registration files.

Road: Personal vehicles, light trucks: Mexico's total for personal vehicles includes light trucks (such as sports utility vehicles, pickups and minivans). However, it is not possible to further disaggregate light trucks. The U.S. total for personal vehicles does include light trucks, and light trucks are also identified as a separate vehicle category. Mexico may also include light trucks such as pickups in its total for commercial freight vehicles. Canada's total for personal vehicles *does not* include light trucks. However, light trucks *are* included in Canada's overall road total.

Water Transport: Freight vessels: The total for freight vessels represents the sum of the liquid, dry bulk carrier, other dry cargo and miscellaneous type vessel categories. Mexican data for container and tank barge vessels have not been included in its total because data for these types of vessels are nonexistent.

Canada

Buses (charter, intercity and local motor): Data are derived from a sample of Canadian companies engaged in scheduled intercity bus, urban transit, school bus, charter and other types of bus service from Statistics Canada's annual *Survey of the Passenger Bus and Urban Transit Industry*. Local motor buses are also included in the total number of transit vehicles.

Commercial freight vehicles: Data are based on Statistics Canada's *Motor Carriers of Freight Survey*, supplemented by data from Canada's vehicle registration files. The figure for commercial freight vehicles is not a sum of single-unit trucks and truck-tractors, because other types of freight vehicles are included in the commercial freight vehicles total. Data for single-unit trucks and truck-tractors are estimates for owner-operators and/or Canadian for-hire motor carriers earning annual revenues greater than or equal to \$25,000 (Canadian).

Transit: The total for Canadian transit includes transit rail and local motor bus. Transit rail includes commuter rail, heavy rail and light rail.

Mexico

Commercial aircraft: Includes taxis not identified in the records as jets or non-jets. Data for taxis are 714 in 1990, 1,051 in 1995 and 950 in 1996.

Road (intercity buses and commercial freight vehicles): Data refer to vehicles devoted to the federal public service and private service.

United States

Air and general aviation: Rounded to the nearest 100.

Road: All U.S. road data represent registered vehicles, except local motor buses which are active passenger vehicles. Totals for all road vehicles comprise all types of buses including intercity, charter, school and local motor bus. Local motor buses are also included in the total number of transit vehicles. Passenger cars include taxis. Light trucks include vans, pickup trucks and sports/utility vehicles.

Rail: Freight rail cars (except those owned by car companies and shippers) and locomotives are Class I railroads only. See Appendix B for the number of freight rail cars owned by car companies and shippers.

Transit: The total for U.S. transit includes transit rail, local motor bus as well as trolley buses, ferries and transit for the disabled. Transit rail includes commuter rail, heavy rail and light rail. The number of commuter railcars includes locomotives.

Water: Recreation and fishing vessels: Represent U.S. owned- and operated-vessels.

All other vessels: Represent U.S. flagged vessels. U.S. flagged vessels are U.S. operated but not necessarily owned.

table 12-1

Number of Transportation Vehicles/Equipment—Continued

SOURCES

Canada

Air: International Civil Aviation Organization. *Civil Aircraft on Register. Digest of Statistics No. 437.* (Montréal, Que.: 1998).

Road: Statistics Canada. *Passenger Bus and Urban Transit Statistics, Catalogue No. 53-215-XPB*; *Road Motor Vehicle Registrations, Catalogue No. 53-219-XPB*; and, *Trucking in Canada, Catalogue No. 53-222-XPB.* (Ottawa, Ont.: various years).

Rail: Statistics Canada. *Rail in Canada, Catalogue No. 52-216-XPB.* (Ottawa, Ont.: various years).

Transit: Statistics Canada. *Passenger Bus and Urban Transit, Catalogue 53-215-XPB.* (Ottawa, Ont.: various years).

Water transport: Lloyd's Register of Shipping. *Statistical Tables - 1990 Table 2*, and *World Fleet Statistics - Table 2*, Editions 1995 and 1996. (London, UK: various years).

Mexico

Air: Secretaría de Comunicaciones y Transportes. Dirección General de Aeronáutica Civil. *La Aviación Mexicana en Cifras, 1990-1996.* (Mexico City, D.F.: 1997).

Rail: Ferrocarriles Nacionales de México. *Series Estadísticas, 1990, 1995 and 1996.* (Mexico City, D.F.: various years).

Road: Instituto Nacional de Estadística, Geografía e Informática based on data collected by the Departamento del Distrito Federal, Dirección General de Autotransporte Urbano, Direcciones de Policía y Tránsito Estatales y Municipales. (Mexico City, D.F.: various years).

Transit: Instituto Nacional de Estadística, Geografía e Informática. Dirección de Estadísticas Económicas. Based on data collected by the Sistema de Transporte Colectivo y Eléctrico in México City, Sistema de Transporte Eléctrico de la Zona Metropolitana in Guadalajara and Sistema de Transporte Colectivo in Monterrey. (Mexico City, D.F.: various years).

Water transport: Secretaría de Comunicaciones y Transportes. Coordinación General de Puertos y Marina Mercante. (Mexico City, D.F.: 1997).

United States

Air: U.S. Department of Transportation. Federal Aviation Administration. *Administrator's Fact Book.* (Washington, DC: August 1998 and December 1996).

U.S. Department of Transportation. Federal Aviation Administration. *Statistical Handbook of Aviation, 1996.* (Washington, DC: 1997).

U.S. Department of Transportation. Federal Aviation Administration. *General Aviation and Air Taxi Activity Survey.* (Washington DC: April 1998).

Road: U.S. Department of Transportation. Federal Highway Administration. *Highway Statistics, 1996.* (Washington, DC: 1997).

American Public Transit Association. *Transit Fact Book, 1996.* (Washington, DC: 1996).

Association of American Railroads. *Railroad Facts.* (Washington, DC: 1997).

National Railroad Passenger Corp. *Amtrak Annual Report 1996.* (Washington, DC: 1996).

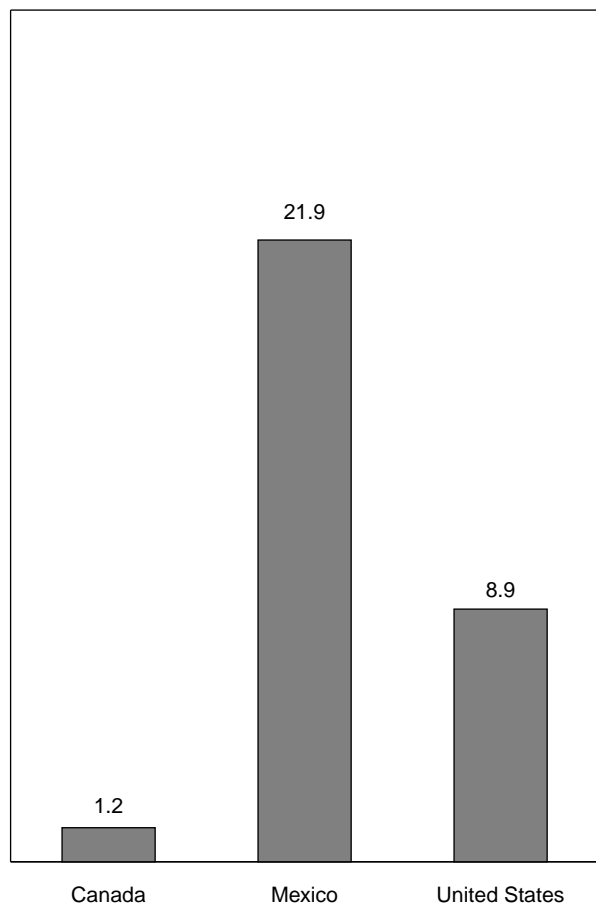
Water transport: U.S. Department of Transportation. U.S. Coast Guard. Office of Marine Safety. *Merchant Vessels of the United States.* (Washington, DC: 1998).

U.S. Army Corps of Engineers. Navigation Data Center. *Waterborne Transportation Lines of the United States, Calendar Year 1996.* (New Orleans, LA: 1997).

f i g u r e 12-1a

Growth in Number of Total Road Vehicles: 1990 to 1996

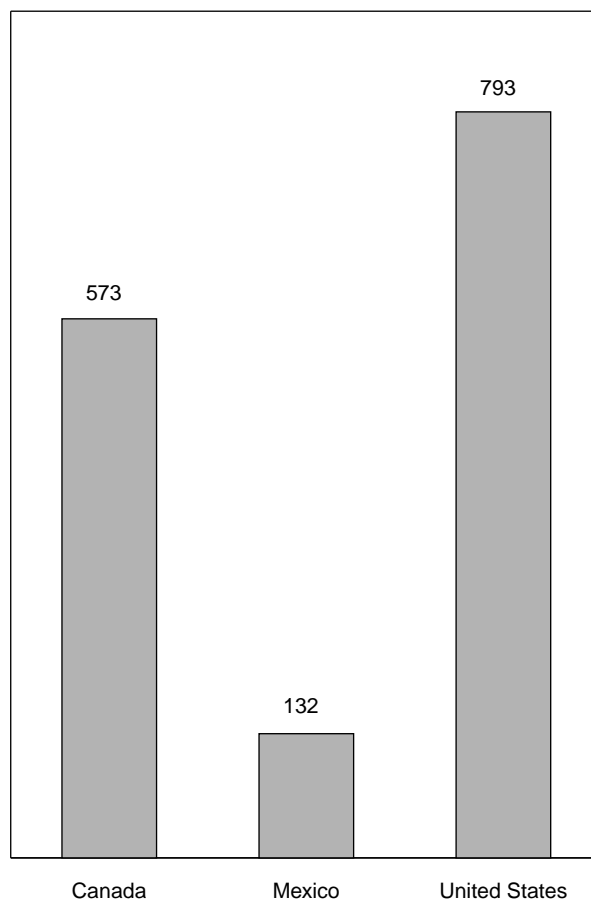
(Percent change)



Notes and sources: See Table 12-1.

f i g u r e 12-1b

Total Road Vehicles per 1,000 Residents: 1996



Notes and sources: See Table 12-1 and Table 1-1.

t a b l e 12-2

Vehicle-Kilometers by Mode

(Millions of vehicle-kilometers)

	Canada			Mexico			United States		
	1990	1995	1996	1990	1995	1996	1990	1995	1996
Air	N	N	N	N	N	N	14,200	13,600	13,400
Air carriers	N	N	N	125	358	306	6,400	7,500	7,700
Road	N	^e317,130	N	N	N	N	3,451,900	3,898,800	3,994,700
Personal vehicles	N	^e 271,124	N	N	N	N	3,207,400	3,601,700	3,690,100
Passenger cars	N	^e 216,360	N	N	N	N	2,266,600	2,314,600	2,362,000
Motorcycles	N	^e 1,044	N	N	N	N	15,400	15,800	15,900
Light trucks	N	^e 53,720	N	N	N	N	925,400	1,271,400	1,312,100
Bus	1,427	1,677	1,604	N	N	N	9,200	10,300	10,500
Charter	100	135	157	N	N	N	N	N	N
Intercity	168	154	130	N	N	N	N	N	N
Local motor	769	742	716	N	N	N	3,400	3,500	3,500
School	390	646	600	N	N	N	N	N	N
Commercial freight vehicles	N	^e 44,329	N	N	N	N	235,300	286,800	294,200
Single-unit trucks	N	N	N	N	N	N	83,500	100,900	103,000
Tractor	N	N	N	N	N	N	151,800	185,900	191,200
Rail, train-kilometers	125	140	135	48	39	41	665	789	803
Freight	101	119	113	27	24	26	612	737	754
Intercity passenger	24	21	22	21	15	15	53	51	48
Transit	N	N	N	U	U	U	5,217	5,713	^P5,895
Transit rail	N	N	N	U	U	U	1,246	1,303	1,323

KEY: e = Data are estimated. N = Data are nonexistent. p = Data are preliminary. U = Data are unavailable.

NOTES

Canada

Road, all data except bus: The number of total road vehicle kilometers for 1995 is an estimate. See Appendix B for explanation.

Bus: All bus data are from a sample of Canadian companies engaged in scheduled intercity bus, urban transit, school bus and charter and other types of bus service from Statistics Canada's annual *Survey of the Passenger Bus and Urban Transit Industry*.

Transit: Although vehicle kilometers for transit rail are nonexistent, vehicle kilometers for local motor bus are included under road, buses.

Mexico

Air: Includes only kilometers traveled by domestic airlines under scheduled operations serving domestic and international flights.

Road: Although no data are collected for vehicle travel on all Mexican roads, the Mexican Institute of Transport (IMT) estimates that the total vehicle-kilometers for all types of passenger cars, trucks and buses using the main interurban road corridors (of which there are 10) is approximately 36 billion vehicle kilometers per year. Main interurban road corridors comprise 25,190 kilometers or approximately 5 percent of the Mexican national highway network. For additional information on main interurban road corridors and Mexico's national road network, see the Secretaría de Comunicaciones y Transportes (SCT) report, *Modernization of the Main Highway System* (Mexico City, D.F.: 1998.)

SOURCES

Canada

Road: Transport Canada. *Transportation in Canada 1997 - Annual Report*. (Ottawa, Ont.: 1998). Transport Canada. Economic Analysis Directorate. (Ottawa, Ont.: 1998).

Rail: Statistics Canada. *Rail in Canada, Catalogue No. 52-216-XPB*. (Ottawa, Ont.: various years).

Bus: Statistics Canada. *Passenger Bus and Urban Transit Statistics, Catalogue No. 53-215-XPB*. (Ottawa, Ont.: various years).

t a b l e 12-2**Vehicle-Kilometers by Mode—Continued****Mexico**

Air: Secretaría de Comunicaciones y Transportes. Dirección General de Aeronáutica Civil. (Mexico City, D.F.: 1998).

Rail: Ferrocarriles Nacionales de México. *Series Estadísticas, 1990, 1995 and 1996*. (Mexico City, D.F.: various years).

United States

Air: U.S. Department of Transportation. Bureau of Transportation Statistics. Office of Airline Information. *Air Carrier Traffic Statistics*. (Washington, DC: 1986-1997).

U.S. Department of Transportation. Federal Aviation Administration. *General Aviation Activity and Avionics Survey*. (Washington, DC: 1990, 1995 and 1996).

Road: U.S. Department of Transportation. Federal Highway Administration. *Highway Statistics, Summary to 1995*. (Washington, DC: 1996).

U.S. Department of Transportation. Federal Highway Administration. *Highway Statistics, 1996*. (Washington, DC: 1997).

Rail: Association of American Railroads. *Railroad Facts*. (Washington, DC: 1997).

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Transit: American Public Transit Association (APTA). *Transit Fact Book 1996*. (Washington, DC: 1996).

